

AMENDMENTS

Amendments to the Claims

1 -10. (Canceled)

11. (Currently amended) A method for treating a mammary gland disorder associated with hyperplastic or hypertonic mammary gland tissue, the method comprising the step of local administration of between about 10^{-2} U/kg and about 200 U/kg of a botulinum toxin type A to the hyperplastic or hypertonic tissue of a mammary gland of a human patient ~~to treat or cause the regression or remission of atypical tissue, thereby treating a mammary gland disorder by reducing a secretion from atypical tissue of the mammary gland~~

wherein administration of the botulinum toxin type A causes the regression or remission of the hyperplastic or hypertonic tissue, or reduces the ability of the hyperplastic or hypertonic tissue to develop into a neoplasm, thereby treating the mammary gland disorder.

12-33. (Cancelled)

34. (Currently amended) A method for treating a mammary gland disorder selected from the group consisting of a breast cyst, sclerosing adenosis, duct papilloma, fibroadenoma, blunt duct adenosis, and proliferative breast disease, the method comprising the step of local administration of between about 10^{-2} U/kg and about 200 U/kg of a botulinum toxin type A to a mammary gland of the patient,

wherein administration of the botulinum toxin type A causes a reduction in the size of the breast cyst, sclerosing adenosis, duct papilloma, fibroadenoma, blunt duct adenosis, or proliferative breast tissue, thereby treating the mammary gland disorder.

35. (Currently amended) The method of claim 11, wherein the mammary gland disorder is associated with hyperplastic ~~or neoplastic~~ mammary gland ~~cells~~ tissue.

36. (Currently amended) The method of claim 11, wherein ~~said atypical tissue comprises hyperplastic tissue, a cyst, or a neoplasm~~ the mammary gland disorder is associated with hypertonic tissue.
37. (Currently amended) The method of claim 11, wherein ~~said~~ the local administration comprises between about 10^{-1} U/kg and about 35 U/kg of a botulinum toxin type A.
38. (Currently amended) The method of claim 11, wherein ~~said~~ the local administration comprises direct injection of botulinum toxin type A into ~~said atypical tissue~~ the hyperplastic or hypertonic tissue.
39. (Currently amended) The method of claim 11, wherein said local administration comprises implantation of a botulinum toxin type A implant onto or into ~~said atypical tissue~~ the hyperplastic or hypertonic tissue.
40. (Currently amended) The method of claim 11, wherein the diameter of ~~said atypical tissue~~ the hyperplastic or hypertonic tissue is reduced by about 20% to about 100% subsequent to said local administration.
41. (Previously presented) The method of claim 34, wherein said local administration comprises between about 10^{-1} U/kg and about 35 U/kg of a botulinum toxin type A.
42. (Currently amended) The method of claim 34, wherein said local administration comprises direct injection of botulinum toxin type A into said breast cyst, sclerosing adenosis, duct papilloma, fibroadenoma, blunt duct adenosis, or proliferative breast ~~disease~~ tissue.
43. (Currently amended) The method of claim 34, wherein said local administration comprises implantation of a botulinum toxin type A implant onto or into said breast cyst, sclerosing adenosis, duct papilloma, fibroadenoma, blunt duct adenosis, or proliferative breast ~~disease~~ tissue.
44. (Currently amended) The method of claim 34, wherein the diameter of said breast cyst,

sclerosing adenosis, duct papilloma, fibroadenoma, blunt duct adenosis, and proliferative breast-disease tissue is reduced by about 20% to about 100% subsequent to said local administration.

45. (New) A method for treating a mammary gland disorder associated with precancerous mammary gland tissue that increases the risk to the patient of development of a breast cancer, the method comprising the step of local administration of between about 10^{-2} U/kg and about 200 U/kg of a botulinum toxin type A to or to the vicinity of the precancerous breast tissue of a mammary gland of the patient,

wherein the precancerous tissue is hyperplastic mammary gland tissue, hypertonic mammary gland tissue, hypertrophic mammary gland tissue, metaplastic mammary gland tissue, or neoplastic mammary gland tissue; and

wherein administration of the botulinum toxin type A causes a reduction in the size or activity of the precancerous mammary gland tissue, thereby treating the mammary gland disorder.

46. (New) The method of claim 45, wherein the local administration comprises between about 10^{-1} U/kg and about 35 U/kg of a botulinum toxin type A.
47. (New) The method of claim 45, wherein the local administration comprises direct injection of botulinum toxin type A into the precancerous mammary gland tissue.
48. (New) The method of claim 45, wherein said local administration comprises implantation of a botulinum toxin type A implant onto or into the precancerous mammary gland tissue.
49. (New) The method of claim 45, wherein the diameter of the precancerous mammary gland tissue is reduced by between about 20% and about 100% subsequent to the local administration of the botulinum toxin type A.